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RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/284,320DATE: 08/10/2000  
TIME: 16:14:43Input Set : A:\seqlist.txt  
Output Set : N:\CRF3\08102000\I284320.raw

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#4  
128

3 <110> APPLICANT: Kato, Seishi et al.  
5 <120> TITLE OF INVENTION: HUMAN PROTEINS HAVING TRANSMEMBRANE DOMAINS AND DNAs  
6 ENCODING THESE PROTEINS  
8 <130> FILE REFERENCE: GIN-6705CPUS  
10 <140> CURRENT APPLICATION NUMBER: 09/284,320  
C--> 11 <141> CURRENT FILING DATE: 1999-06-21  
13 <150> PRIOR APPLICATION NUMBER: JP 8-301429  
14 <151> PRIOR FILING DATE: 1996-11-13  
16 <150> PRIOR APPLICATION NUMBER: PCT/JP97/04056  
17 <151> PRIOR FILING DATE: 1997-11-07  
19 <160> NUMBER OF SEQ ID NOS: 91  
21 <170> SOFTWARE: PatentIn Ver. 2.0  
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24 <211> LENGTH: 205  
25 <212> TYPE: PRT  
26 <213> ORGANISM: Homo sapiens  
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32 Ala Cys Ala Leu Ala Val Gly Val Cys Tyr Thr Ile Phe Asp Leu Gly  
33 20 25 30  
35 Phe Arg Phe Asp Val Ala Trp Phe Leu Thr Glu Thr Ser Pro Phe Met  
36 35 40 45  
38 Trp Ser Asn Leu Gly Ile Gly Leu Ala Ile Ser Leu Ser Val Val Gly  
39 50 55 60  
41 Ala Ala Trp Gly Ile Tyr Ile Thr Gly Ser Ser Ile Ile Gly Gly Gly  
42 65 70 75 80  
44 Val Lys Ala Pro Arg Ile Lys Thr Lys Asn Leu Val Ser Ile Ile Phe  
45 85 90 95  
47 Cys Glu Ala Val Ala Ile Tyr Gly Ile Ile Met Ala Ile Val Ile Ser  
48 100 105 110  
50 Asn Met Ala Glu Pro Phe Ser Ala Thr Asp Pro Lys Ala Ile Gly His  
51 115 120 125  
53 Arg Asn Tyr His Ala Gly Tyr Ser Met Phe Gly Ala Gly Leu Thr Val  
54 130 135 140  
56 Gly Leu Ser Asn Leu Phe Cys Gly Val Cys Val Gly Ile Val Gly Ser  
57 145 150 155 160  
59 Gly Ala Ala Leu Ala Asp Ala Gln Asn Pro Ser Leu Phe Val Lys Ile  
60 165 170 175  
62 Leu Ile Val Glu Ile Phe Gly Ser Ala Ile Gly Leu Phe Gly Val Ile  
63 180 185 190  
65 Val Ala Ile Leu Gln Thr Ser Arg Val Lys Met Gly Asp  
66 195 200 205  
69 <210> SEQ ID NO: 2  
70 <211> LENGTH: 371  
71 <212> TYPE: PRT  
72 <213> ORGANISM: Homo sapiens

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74 <400> SEQUENCE: 2
75 Met Ser His Glu Lys Ser Phe Leu Val Ser Gly Asp Asn Tyr Pro Pro
76 1 5 10 15
78 Pro Asn Pro Gly Tyr Pro Gly Gly Pro Gln Pro Pro Met Pro Pro Tyr
79 20 25 30
81 Ala Gln Pro Pro Tyr Pro Gly Ala Pro Tyr Pro Gln Pro Pro Phe Gln
82 35 40 45
84 Pro Ser Pro Tyr Gly Gln Pro Gly Tyr Pro His Gly Pro Ser Pro Tyr
85 50 55 60
87 Pro Gln Gly Gly Tyr Pro Gln Gly Pro Tyr Pro Gln Gly Gly Tyr Pro
88 65 70 75 80
90 Gln Gly Pro Tyr Pro Gln Glu Gly Tyr Pro Gln Gly Pro Tyr Pro Gln
91 85 90 95
93 Gly Gly Tyr Pro Gln Gly Pro Tyr Pro Gln Ser Pro Phe Pro Pro Asn
94 100 105 110
96 Pro Tyr Gly Gln Pro Gln Val Phe Pro Gly Gln Asp Pro Asp Ser Pro
97 115 120 125
99 Gln His Gly Asn Tyr Gln Glu Gly Pro Pro Ser Tyr Tyr Asp Asn
100 130 135 140
102 Gln Asp Phe Pro Ala Thr Asn Trp Asp Asp Lys Ser Ile Arg Gln Ala
103 145 150 155 160
105 Phe Ile Arg Lys Val Phe Leu Val Leu Thr Leu Gln Leu Ser Val Thr
106 165 170 175
108 Leu Ser Thr Val Ser Val Phe Thr Phe Val Ala Glu Val Lys Gly Phe
109 180 185 190
111 Val Arg Glu Asn Val Trp Thr Tyr Tyr Val Ser Tyr Ala Val Phe Phe
112 195 200 205
114 Ile Ser Leu Ile Val Leu Ser Cys Cys Gly Asp Phe Arg Arg Lys His
115 210 215 220
117 Pro Trp Asn Leu Val Ala Leu Ser Val Leu Thr Ala Ser Leu Ser Tyr
118 225 230 235 240
120 Met Val Gly Met Ile Ala Ser Phe Tyr Asn Thr Glu Ala Val Ile Met
121 245 250 255
123 Ala Val Gly Ile Thr Thr Ala Val Cys Phe Thr Val Val Ile Phe Ser
124 260 265 270
126 Met Gln Thr Arg Tyr Asp Phe Thr Ser Cys Met Gly Val Leu Leu Val
127 275 280 285
129 Ser Met Val Val Leu Phe Ile Phe Ala Ile Leu Cys Ile Phe Ile Arg
130 290 295 300
132 Asn Arg Ile Leu Glu Ile Val Tyr Ala Ser Leu Gly Ala Leu Leu Phe
133 305 310 315 320
135 Thr Cys Phe Leu Ala Val Asp Thr Gln Leu Leu Gly Asn Lys Gln
136 325 330 335
138 Leu Ser Leu Ser Pro Glu Glu Tyr Val Phe Ala Ala Leu Asn Leu Tyr
139 340 345 350
141 Thr Asp Ile Ile Asn Ile Phe Leu Tyr Ile Leu Thr Ile Ile Gly Arg
142 355 360 365
144 Ala Lys Glu
145 370

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149 <211> LENGTH: 179
150 <212> TYPE: PRT /
151 <213> ORGANISM: Homo sapiens
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157 Gln Leu Tyr Tyr Gln Val Leu Asn Phe Gly Met Ile Val Ser Ser Ala
158 20 25 30
160 Leu Met Ile Trp Lys Gly Leu Met Val Ile Thr Gly Ser Glu Ser Pro
161 35 40 45
163 Ile Val Val Val Leu Ser Gly Ser Met Glu Pro Ala Phe His Arg Gly
164 50 55 60
166 Asp Leu Leu Phe Leu Thr Asn Arg Val Glu Asp Pro Ile Arg Val Gly
167 65 70 75 80
169 Glu Ile Val Val Phe Arg Ile Glu Gly Arg Glu Ile Pro Ile Val His
170 85 90 95
172 Arg Val Leu Lys Ile His Glu Lys Gln Asn Gly His Ile Lys Phe Leu
173 100 105 110
175 Thr Lys Gly Asp Asn Asn Ala Val Asp Asp Arg Gly Leu Tyr Lys Gln
176 115 120 125
178 Gly Gln His Trp Leu Glu Lys Lys Asp Val Val Gly Arg Ala Arg Gly
179 130 135 140
181 Phe Val Pro Tyr Ile Gly Ile Val Thr Ile Leu Met Asn Asp Tyr Pro
182 145 150 155 160
184 Lys Phe Lys Tyr Ala Val Leu Phe Leu Leu Gly Leu Phe Val Leu Val
185 165 170 175
187 His Arg Glu
191 <210> SEQ ID NO: 4
192 <211> LENGTH: 347
193 <212> TYPE: PRT /
194 <213> ORGANISM: Homo sapiens
196 <400> SEQUENCE: 4
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198 1 5 10 15
200 Phe Leu Ala Ser Pro Ser Gly Val Arg Leu Val Gly Gly Leu His Arg
201 20 25 30
203 Cys Glu Gly Arg Val Glu Val Glu Gln Lys Gly Gln Trp Gly Thr Val
204 35 40 45
206 Cys Asp Asp Gly Trp Asp Ile Lys Asp Val Ala Val Leu Cys Arg Glu
207 50 55 60
209 Leu Gly Cys Gly Ala Ala Ser Gly Thr Pro Ser Gly Ile Leu Tyr Glu
210 65 70 75 80
212 Pro Pro Ala Glu Lys Glu Gln Lys Val Leu Ile Gln Ser Val Ser Cys
213 85 90 95
215 Thr Gly Thr Glu Asp Thr Leu Ala Gln Cys Glu Gln Glu Glu Val Tyr
216 100 105 110
218 Asp Cys Ser His Glu Glu Asp Ala Gly Ala Ser Cys Glu Asn Pro Glu
219 115 120 125

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221 Ser Ser Phe Ser Pro Val Pro Glu Gly Val Arg Leu Ala Asp Gly Pro
222      130      135      140
224 Gly His Cys Lys Gly Arg Val Glu Val Lys His Gln Asn Gln Trp Tyr
225 145      150      155      160
227 Thr Val Cys Gln Thr Gly Trp Ser Leu Arg Ala Ala Lys Val Val Cys
228      165      170      175
230 Arg Gln Leu Gly Cys Gly Arg Ala Val Leu Thr Gln Lys Arg Cys Asn
231      180      185      190
233 Lys His Ala Tyr Gly Arg Lys Pro Ile Trp Leu Ser Gln Met Ser Cys
234      195      200      205
236 Ser Gly Arg Glu Ala Thr Leu Gln Asp Cys Pro Ser Gly Pro Trp Gly
237      210      215      220
239 Lys Asn Thr Cys Asn His Asp Glu Asp Thr Trp Val Glu Cys Glu Asp
240 225      230      235      240
242 Pro Phe Asp Leu Arg Leu Val Gly Gly Asp Asn Leu Cys Ser Gly Arg
243      245      250      255
245 Leu Glu Val Leu His Lys Gly Val Trp Gly Ser Val Cys Asp Asp Asn
246      260      265      270
248 Trp Gly Glu Lys Glu Asp Gln Val Val Cys Lys Gln Leu Gly Cys Gly
249      275      280      285
251 Lys Ser Leu Ser Pro Ser Phe Arg Asp Arg Lys Cys Tyr Gly Pro Gly
252      290      295      300
254 Val Gly Arg Ile Trp Leu Asp Asn Val Arg Cys Ser Gly Glu Glu Gln
255 305      310      315      320
257 Ser Leu Glu Gln Cys Gln His Arg Phe Trp Gly Phe His Asp Cys Thr
258      325      330      335
260 His Gln Glu Asp Val Ala Val Ile Cys Ser Gly
261      340      345
264 <210> SEQ ID NO: 5
265 <211> LENGTH: 554
266 <212> TYPE: PRT /
267 <213> ORGANISM: Homo sapiens /
269 <400> SEQUENCE: 5
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271 1      5      10      15
273 Phe Gln Lys Gln Ala Phe Leu Ile Leu Cys Leu Leu Ser Ala Ala Phe
274      20      25      30
276 Ala Pro Ile Cys Val Gly Ile Val Phe Leu Gly Phe Thr Pro Asp His
277      35      40      45
279 His Cys Gln Ser Pro Gly Val Ala Glu Leu Ser Gln Arg Cys Gly Trp
280      50      55      60
282 Ser Pro Ala Glu Glu Leu Asn Tyr Thr Val Pro Gly Leu Gly Pro Ala
283 65      70      75      80
285 Gly Glu Ala Phe Leu Gly Gln Cys Arg Arg Tyr Glu Val Asp Trp Asn
286      85      90      95
288 Gln Ser Ala Leu Ser Cys Val Asp Pro Leu Ala Ser Leu Ala Thr Asn
289      100      105      110
291 Arg Ser His Leu Pro Leu Gly Pro Cys Gln Asp Gly Trp Val Tyr Asp
292      115      120      125

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294 Thr Pro Gly Ser Ser Ile Val Thr Glu Phe Asn Leu Val Cys Ala Asp
295      130      135      140
297 Ser Trp Lys Leu Asp Leu Phe Gln Ser Cys Leu Asn Ala Gly Phe Phe
298 145      150      155      160
300 Phe Gly Ser Leu Gly Val Gly Tyr Phe Ala Asp Arg Phe Gly Arg Lys
301      165      170      175
303 Leu Cys Leu Leu Gly Thr Val Leu Val Asn Ala Val Ser Gly Val Leu
304      180      185      190
306 Met Ala Phe Ser Pro Asn Tyr Met Ser Met Leu Leu Phe Arg Leu Leu
307      195      200      205
309 Gln Gly Leu Val Ser Lys Gly Asn Trp Met Ala Gly Tyr Thr Leu Ile
310      210      215      220
312 Thr Glu Phe Val Gly Ser Gly Ser Arg Arg Thr Val Ala Ile Met Tyr
313 225      230      235      240
315 Gln Met Ala Phe Thr Val Gly Leu Val Ala Leu Thr Gly Leu Ala Tyr
316      245      250      255
318 Ala Leu Pro His Trp Arg Trp Leu Gln Leu Ala Val Ser Leu Pro Thr
319      260      265      270
321 Phe Leu Phe Leu Leu Tyr Tyr Trp Cys Val Pro Glu Ser Pro Arg Trp
322      275      280      285
324 Leu Leu Ser Gln Lys Arg Asn Thr Glu Ala Ile Lys Ile Met Asp His
325      290      295      300
327 Ile Ala Gln Lys Asn Gly Lys Leu Pro Pro Ala Asp Leu Lys Met Leu
328 305      310      315      320
330 Ser Leu Glu Glu Asp Val Thr Glu Lys Leu Ser Pro Ser Phe Ala Asp
331      325      330      335
333 Leu Phe Arg Thr Pro Arg Leu Arg Lys Arg Thr Phe Ile Leu Met Tyr
334      340      345      350
336 Leu Trp Phe Thr Asp Ser Val Leu Tyr Gln Gly Leu Ile Leu His Met
337      355      360      365
339 Gly Ala Thr Ser Gly Asn Leu Tyr Leu Asp Phe Leu Tyr Ser Ala Leu
340      370      375      380
342 Val Glu Ile Pro Gly Ala Phe Ile Ala Leu Ile Thr Ile Asp Arg Val
343 385      390      395      400
345 Gly Arg Ile Tyr Pro Met Ala Val Ser Asn Leu Leu Ala Gly Ala Ala
346      405      410      415
348 Cys Leu Val Met Ile Phe Ile Ser Pro Asp Leu His Trp Leu Asn Ile
349      420      425      430
351 Ile Ile Met Cys Val Gly Arg Met Gly Ile Thr Ile Ala Ile Gln Met
352      435      440      445
354 Ile Cys Leu Val Asn Ala Glu Leu Tyr Pro Thr Phe Val Arg Asn Leu
355      450      455      460
357 Gly Val Met Val Cys Ser Ser Leu Cys Asp Ile Gly Gly Ile Ile Thr
358 465      470      475      480
360 Pro Phe Ile Val Phe Arg Leu Arg Glu Val Trp Gln Ala Leu Pro Leu
361      485      490      495
363 Ile Leu Phe Ala Val Leu Gly Leu Leu Ala Ala Gly Val Thr Leu Leu
364      500      505      510
366 Leu Pro Glu Thr Lys Gly Val Ala Leu Pro Glu Thr Met Lys Asp Ala

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VERIFICATION SUMMARY

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L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date